Zihan Wang, Ph.D.

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Berkeley CA, 94709, USA (+1) 9098936514

Education

Tsinghua University, China 2019/09 – 2024/06
Ph.D. in Data Science and Information technology with ***Excellent Graduate of Beijing***
Advisor: Assoc. Prof. Wenbo Ding
Ph.D. Thesis: Key Technologies of Flexible Triboelectric Sensors for Robotic Applications

Herriot-Watt University, UK 2015/08 - 2019/06
B.Eng., Telecommunications Engineering with ***First Class Honors***

Xidian University, China 2015/08 - 2019/06
B.Eng., Telecommunications Engineering with ***Outstanding Graduates***

University of California, Berkeley, USA 2023/02 – 2024/06
Visiting Scholar, Department of Mechanical Engineering, Advisor: Prof. Liwei Lin,

Boston University, USA 2018/07 - 2018/08
Visiting Scholar

Research Experience

University of California, Berkeley, USA 2024/07 – Today
Postdoctoral Fellow, Department of Mechanical Engineering
Advisor: Prof. Liwei Lin, James Marshall Wells Professor of Mechanical Engineering

Neusoft, Dalian, China 2016/04 – 2016/05
Intern, Embedded System Engineer

Selected Awards & Honors

Excellent graduate of Beijing 2024/06
2nd Prize of National Outstanding Graduate Students Workshop 2024/04
IEEE ICRA Travel Grant 2023/04
First Class Scholarship of Tsinghua University 2022/11
National Scholarship for Graduates (The Ministry of Education of China, **top 2%**) 2021/12
Deputy Principal's Award (Herriot-Watt University) 2019/06
Excellent graduate of Xidian University 2019/06

Academic Services

Editorial Board Member of *Exploration*
Web Chair of ACM Ubicomp 2021 CPD Workshop
Journal Reviewer of *Chemical Engineering Journal, Digital Signal Processing, Advanced Intelligent Systems, EUSIPCO, Open Res. Eur., IEEE ROBIO, IEEE JSTSP, and ACM Ubicomp*
Teaching Assistant of self-powered system at Tsinghua University

Academic Achievements

Number of published papers: ***27***, Google Scholar Citation: ***1177***, H-index: ***15***

Selected Publications

[1] **Zihan Wang**[#], Kai-Chong Lei[#], Huaze Tang, Yang Luo, Hongfa Zhao, Peisheng He, Wenbo Ding*, Liwei Lin. "Stretchable Liquid Metal E-skin for Soft Robot Proprioceptive Vibration Sensing," *IEEE Sensors Journal*, 2024.

[2] **Zihan Wang**[#], Kai-Chong Lei[#], Huaze Tang, Shoujie Li, Yuan Dai, Wenbo Ding*, Xiao-Ping Zhang. "STEV: Stretchable Triboelectric E-skin enabled Proprioceptive Vibration Sensing for Soft Robot," IEEE International Conference on Robotics and Automation (ICRA), 2023. **(Top Conference in Robotics)**

[3] **Zihan Wang**[#], Yuchao Jin[#], Chengyue Lu[#], Jiyu Wang*, Ziwu Song, Xu Yang, Yidan Cao, Yunlong Zi, Zhong Lin Wang*, Wenbo Ding*, "Triboelectric Nanogenerator enabled Mechanical Modulation for Infrared Wireless Communications," *Energy & Environmental Science*, 2022. **(Impact Factor: 32.5)**

[4] **Zihan Wang**, Jiarong Li, Yuchao Jin, Jiyu Wang, Fang Yang, Gang Li, Xiaoyue Ni, Wenbo Ding*, "Sensing beyond itself: Multi-functional use of ubiquitous signals towards wearable applications," *Digital Signal Processing*, 2021.

[5] Kit-Wa Sou[#], Wang-Sing Chan[#], Kai-Chong Le[#], **Zihan Wang***, Shoujie Li, Dengfeng Peng, Wenbo Ding, "A Bio-Inspired Event-Driven Mechanoluminescent Visuotactile Sensor for Intelligent Interactions," *Advanced Functional Materials*, 2024. **(Impact Factor: 18.5)**

[6] Yang Luo[#], **Zihan Wang**[#], Jiyu Wang, Xiao Xiao, Qian Li, Wenbo Ding*, Hongyan Fu*, "Triboelectric bending sensor based smart glove towards intuitive multi-dimensional human-machine interfaces," *Nano Energy*, 2021. **(Impact Factor: 16.8, Front Cover)**

[7] Han Wu[#], **Zihan Wang**[#], Boyu Zhu, Hanqing Wang, Chengyue Lu, Meicun Kang, Shenglin Kang, Wenbo Ding*, Lijun Yang, Ruijin Liao, Jiyu Wang*, Zhong Lin Wang* "All-in-One Sensing System for Online Vibration Monitoring via IR Wireless Communication as Driven by High-Power TENG," *Advanced Energy Materials*, 2023. **(Impact Factor: 24.4)**

[8] Jiarong Li[#], Zixuan Xie[#], **Zihan Wang**[#], Zenan Lin, Chengyue Lu, Zihao Zhao, Yuchao Jin, Jihong Yin, Shilong Mu, Chaobo Zhang, Weihua Gui, Xiaojun Liang*, Jiyu Wang*, Wenbo Ding* "A triboelectric gait sensor system for human activity recognition and user identification," *Nano Energy*, 2023. **(Impact Factor: 16.8)**

[9] Jiangfeng Lu[#], Zicong Miao[#], **Zihan Wang**[#], Ying Liu, Dekuan Zhu, Jihong Yin, Fei Tang, Xiaohao Wang, Wenbo Ding*, Min Zhang*, "Piezoelectric soft robot driven by mechanical energy," *Nano Research*, 2022.

[10] Ziwu Song[#], Jihong Yin[#], **Zihan Wang**[#], Chengyue Lu, Ze Yang, Zihao Zhao, Zenan Lin, Jiyu Wang*, Changsheng Wu, Jia Cheng, Yuan Dai, Yunlong Zi, Shao-Lun Huang, Xinlei Chen, Jian Song, Gang Li, Wenbo Ding*, "A flexible triboelectric tactile sensor for simultaneous material and texture recognition," *Nano Energy*, 2022. **(Impact Factor: 16.8)**

#: Co-first author, *: Corresponding author

Licensed Patent

Wenbo Ding, Shao-lun Huang, Jiyu Wang, Chengyue Lu, **Zihan Wang**, Yuchao Jin. A mechanical modulation enabled self-powered non-visible light communication method: China, CN114665973B. 2023.

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